I CLAIM

1.   A method for loading class files from a server to a client comprising:

    loading an application class onto a gateway server that preloads and preresolves said class;

    creating a binary representation of new portions of the preloaded and preresolved class at said gateway; and

    sending only the new portion to the client.

2.   A method for loading Java class files from a server to a client device comprising the steps of:

    a.   gateway retrieving a Java class file;

    b.   gateway preloading and preresolving said Java class file and creating a representation of the Java class file;

    c.   determining at the gateway new portions of said representation of the Java class file not loaded in said client device;

    d.   creating at the gateway a binary representation of only the new portion of said representation of the Java class file;

    e.   sending said binary representation of said new portion to the client device;

    f.   loading said binary representation of said new portion into said client device; and,

    g.   copying said binary representation into the internal class structures in the interpreter of Java virtual machine of the client device.

3.   The method of Claim 2, wherein step b includes creating a c-code representation of the Java class file and

step c includes determining the new portions of said c-code representation, and step d creates a binary representation of only the new portion of said c-code representation.

    4.   The method of Claim 2, wherein said sending step e includes sending over a wireless network.

    5.   A system for loading Java class files to a client device comprising:

    a.   a gateway coupled to said server and responsive to a Java class file for creating a c-code representation of said class file;

    b.   said gateway creating a binary representation of said c-code representation;

    c.   a network coupled between said gateway and said client device for sending the binary representation to said client device;

    d.   a loader for loading said binary representation at said client device; and,

    e.   means for copying said binary representation into the internal class structure in an interpreter of said client device.

    6.   The system of Claim 5, wherein said gateway includes means for determining new portions of the said c-code representation, and in step b said gateway creates binary representations of only new portions of said c-code representations, and in step c said network sending only said new portions to said client device.

    7.   A method for loading Java class files to an embedded client device from a server comprising the steps of:

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    a.   gateway retrieving a Java class file,

    b.   gateway preloading and preresolving the Java class file to produce a representation of the Java class file;

5   c.   determining at the gateway a new portion of the representation;

    d.   creating at the gateway a binary representation of only said new portion of the preloaded and preresolved representation of the Java class file;

10   e.   sending said binary representation to the embedded client device;

    f.   loading said binary representation into said embedded client device; and,

    g.   copying said binary representation into the

15   internal class structures in the interpreter of Java virtual machine of the embedded client device.

    8.   A system for loading Java class files from a server to an embedded client device comprising:

    a.   a preloader and preresolver in a gateway

20   coupled to said server and responsive to a Java class file for preloading and preresolving a representation of said class file;

    b.   said gateway creating a binary representation of said preloaded and preresolved

25   representation of said class file;

    c.   a wireless network coupled between said gateway and said embedded client device for sending the binary representation to said embedded device;

    d. a loader for loading said binary representation at said embedded client device; and,

    e. means for copying said binary representation into the internal class structure in an interpreter of said

5 embedded client device.

    9. The system of Claim 7, wherein said gateway includes means for determining new portions of said preloaded and preresolved representations of the class and sending only said new portions to said embedded client

10 device.